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OMSAPC ADVISORY CIRCULAR

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR AND WASTE MANAGEMENT

A/C NO. 26B-1

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Subject: Representativeness of Unleaded Mileage Accumulation Fuels

A. Purpose

This Advisory Circular supplements Advisory Circular No. 26-B, by eliminating for the 1979 model year certification program the use of methylcyclopentadienyl manganese tricarbonyl (MMT) in unleaded mileage accumulation test fuel.

B. Background

1. On January 7, 1977, EPA issued Advisory Circular No. 26-B, which stated that to be representative of in-use fuels 1979 model year unleaded certification mileage accumulation fuel would have to contain MMT at a level of 0.115 to 0.135 grams manganese per gallon. That action was taken for reasons discussed under Sections D-1 and E-1 of Advisory Circular No. 26-B.

2. The Clean Air Act Amendments of 1977 (P.L. 95-95, signed into law on August 7, 1977) provide (among other things) that any fuel additive which was first introduced into commerce between January 1, 1974 and March 31, 1977, or for which the quantities of use were increased during this period, may not be used in commercial fuel after September 15, 1978,* unless the Administrator waives such prohibition on the basis of a determination that such fuel additive or a specified concentration thereof will not, over the useful life of the vehicle, cause or contribute to the failure of any emissions control device or system to achieve compliance by the vehicle with emission standards to which the vehicle has been certified. [See §211(e)(3) of the Clean Air Act, as amended by §221 of P.L. 95-95]. The conference report elaborates that the Administrator should consider the "entire emission performance of a vehicle," so that if a "fuel additive causes an increase in engine emissions so as to increase tailpipe emissions ... so as to cause or contribute to the vehicle's failure to

* This prohibition does not apply to additives substantially similar to additives used to certify 1975 and later model year vehicles.



meet the standards at any point in its useful life, the Administrator could not waive the prohibition." [H.R. Rep. No. 95-564, 95th Cong., 1st Sess. 161 (Aug. 3, 1977).]

3. MMT is a fuel additive used in unleaded gasoline that was introduced during the 1974 through 1977 period, and is thus subject to this new provision of law. MMT therefore may not be used in fuel after September 15, 1978 except at a level of concentration that the Administrator may have found to be sufficiently safe that a waiver is justified. Any manufacturer of MMT, or of fuel in which MMT is used, may petition the Administrator to determine that MMT at a particular concentration (or at unlimited levels of use) is sufficiently safe that a waiver is justified. Therefore, the following situations are possible:

a. If no petition is filed or if a petition is filed but the petitioner does not prove that MMT is sufficiently safe that a waiver is justified, MMT will be prohibited for use in fuel as of September 15, 1978.

b. If the Administrator determines that MMT at some level of concentration does not cause or contribute to failure of an emission control system, MMT would be allowed to continue to be used at such concentration after September 15, 1978.

4. Inasmuch as 1979 model year certification is about to begin, and inasmuch as manufacturers must begin to accumulate mileage on test cars, a prompt decision by EPA on the use of MMT in 1979 model year mileage accumulation fuel is essential. On the basis of the foregoing, it appears appropriate for EPA to delete the requirement for the use of MMT in mileage accumulation fuel, on the basis of the following reasoning:

a. EPA regulations provide that gasoline representative of commercial gasoline which will be generally available through retail outlets is to be used in service accumulation for gasoline-fueled vehicles and engines (40 CFR §§86.113-78(a)(2) and 86.777-7(b)). This provision is intended to insure among other things that, so far as possible, fuels and additives that may harm emission performance in the field are used also in service accumulation during the demonstration of compliance with emission standards.

b. If the Administrator does not grant a waiver allowing MMT to continue to be used, MMT will be prohibited as of September 15, 1978, and will therefore not be found in commercial gasoline generally available after that date. In that event, there will be no need for having used MMT in service accumulation fuel for 1979 model year vehicles, which will then operate in the field on MMT-free unleaded fuel.



c. If the Administrator does grant a waiver allowing use of MMT at some particular level of concentration, he will have determined that MMT at that particular concentration does not cause or contribute to failure of any control device or system. If MMT is thus determined to be acceptable in such concentrations, deterioration factors and emission results generated by vehicles operating on MMT-free unleaded fuel will under the present circumstance be acceptable for purposes of the demonstration required by section 206(a) of the Clean Air Act.

5. It therefore appears reasonable to eliminate for the 1979 model year any requirement for the use of MMT in unleaded mileage accumulation gasoline, because either 1979 model year cars will operate in the field on MMT-free unleaded fuel, or on unleaded fuel containing no more than a level of MMT that has been determined not to adversely affect emission control systems.

6. However, if MMT is allowed to be used after September 15, 1978, EPA may determine that unleaded mileage accumulation gasoline used in subsequent model year certification must contain a level of MMT that would be representative of commercial fuel anticipated to be used in vehicles, for the reason discussed in subparagraph D.1.b. of Advisory Circular 26-B.

C. Applicability

The policy reflected in this advisory circular will apply to the certification testing of 1979 model year gasoline-fueled vehicles and engines which use unleaded fuels.

D. MMT Usage in Mileage Accumulation Fuel

1. For the 1979 model year, and for subsequent model years unless revised, the specification for MMT usage in unleaded mileage accumulation fuel in Advisory Circular No. 26-B is hereby rescinded.

2. The specifications in Advisory Circular No. 26-B for the use of sulfur, lead and phosphorus in unleaded mileage accumulation fuel are retained.